Application of new space-based PPP-RTK positioning method for determining of exact location of Petroleum off-shore Structures

Fereydoun Nobakht-Ersi
University of Tehran, Iran

In many off-shore applications positions of petroleum structures need to be determined with high precision (sub cm-accuracy). The Global Positioning System (GPS) is very appropriate for this goal. High precise PPP-RTK positioning is in fundamental feasible if corrections from a GPS local (or global) network of stations are applied to the single-receiver data of a off-shore user. In this study we will discuss a technique that allows the single-receiver user to resolve integer ambiguity resolution (IAR) within short time spans and then enable high-precision positioning in off-shore petroleum applications.

Biography
Fereydoun Nobakht-Ersi is a PhD student at University of Tehran, Iran. His research interests are the use of the Global Positioning System (GPS) and mathematical modelling. He has published more than 11 research articles, a book and some lecture notes in the field of positioning and Geoscience.

fnobakht@ut.ac.ir